

# CONSTRUCTION

The construction industry is divided into three major segments: general building contractors, heavy construction contractors, and special trade contractors. Construction has a very large number of self-employed workers. Workers in the industry have relatively high hourly earnings, most of who are skilled crafts workers or laborers, helpers, and apprentices. Many jobs in the industry may be entered without any formal classroom training after high school or with a variety of educational backgrounds. Employment prospects are favorable with some counties experiencing a shortage of workers.

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# 2001 CAREER DIRECTIONS In CONSTRUCTION

A Brief Look at.....

Jobs  
Outlook  
Wages  
Education



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Selected Occupation/Description	1998 Employment	10-year Growth Rate	Average Annual Openings	1999 Average Wage	Education/Training
<b>Carpenters:</b> Construct, erect, install and repair structures, fixtures, and equipment of wood, plywood, and wallboard, using carpentry tools and woodworking machines.	3,850	21.3%	180	\$24.44	Long-term on-the-job training: Occupations that generally require more than 12 months of on-the-job training or combined work experience and formal classroom instruction before workers develop the skills needed for average job performance. Includes occupation-specific employer-sponsored programs such as police and fire academies.
<b>Civil Engineers:</b> Perform engineering duties in planning, designing, and overseeing construction and maintenance of structures and facilities such as roads, railroads, airports, bridges, harbors, channels, dams, irrigation projects, pipelines, power plants, water and sewage systems, and waste disposal units. Include Traffic Engineers who specialize in studying vehicular and pedestrian traffic conditions.	1,620	16.7%	60	\$26.66	Bachelor's degree: Completion of a bachelor's degree requires at least four but not more than five years of full-time academic work after high school. Considered the minimum training requirement for most professional occupations.
<b>Construction Managers:</b> Plan, organize, direct, control, or coordinate, usually through subordinate supervisory personnel, activities concerned with the construction and maintenance of structures, facilities, and systems. Include specialized construction fields such as carpentry or plumbing. General Managers of large construction contracting firms should be reported as General Managers and Top Executives.	740	31.1%	30	\$36.81	Bachelor's degree: Completion of a bachelor's degree requires at least four but not more than five years of full-time academic work after high school. Considered the minimum training requirement for most professional occupations.
<b>Electricians:</b> Install, maintain, and repair electrical wiring, equipment, and fixtures. Insure that work is in accordance with relevant codes. May read blueprints. Include Protective Signal Installers and Repairers and Street Light Servicers.	1,850	16.2%	70	\$21.95	Long-term on-the-job training: Occupations that generally require more than 12 months of on-the-job training or combined work experience and formal classroom instruction before workers develop the skills needed for average job performance. Includes occupation-specific employer-sponsored programs such as police and fire academies.
<b>Helpers, Carpenter:</b> Help Carpenters or carpentry-related craft workers by performing duties of lesser skill. Duties include supplying or holding materials or tools, and cleaning work area and equipment. Exclude apprentice workers and report them with the appropriate construction or maintenance trade occupation. Exclude construction or maintenance laborers who do not primarily assist Carpenters or carpentry-related craft workers.	590	28.8%	50	\$16.57	Short-term on-the-job training: Occupations in which workers can achieve average job performance in just a few days or weeks by working with and observing experience employees. The largest training category, comprising four of every ten workers in the economy.
<b>Operating Engineers:</b> Operate several types of power construction equipment, such as compressors, pumps, hoists, derricks, cranes, shovels, tractors, scrapers, or motor graders to excavate, move and grade earth, erect structures, or pour concrete or other hard surface pavement. May repair and maintain equipment in addition to other duties. Exclude workers who specialize in operation of a single type of heavy equipment, such as a bulldozer or crane.	700	25.7%	30	\$25.79	Medium-term on-the-job training: Occupations requiring one to twelve months of combined on-the-job experience and informal training. Individuals undergoing training are generally considered to be employed in the occupation.
<b>Sheet Metal Workers:</b> Fabricate, assemble, install, and repair sheet metal products and equipment, such as control boxes, drainpipes, and furnace casings. Work may involve any of the following: Set up and operate fabricating machines to cut, bend, and straighten sheet metal; shape metal over anvils, blocks, or forms using hammer; operate soldering and welding equipment to join sheet metal parts; inspect, assemble, and smooth seams and joints of burred surfaces.	550	14.5%	20	\$24.41	Medium-term on-the-job training: Occupations requiring one to twelve months of combined on-the-job experience and informal training. Individuals undergoing training are generally considered to be employed in the occupation.
<b>Truck Drivers, Heavy:</b> Drive a tractor-trailer combination or a truck with a capacity of at least 3 tons, to transport and deliver goods, livestock, or materials in liquid, loose or packaged form. May be required to unload truck.	3,640	15.7%	110	\$15.24	Short-term on-the-job training: Occupations in which workers can achieve average job performance in just a few days or weeks by working with and observing experience employees. The largest training category, comprising four of every ten workers in the economy.

Sources: Dictionary of Occupations, Occupational Employment Statistics, Bureau of Labor Statistics, U.S. Dept. of Labor, 1998  
Employment Outlook for Industries & Occupations, 1998-2008, Hawaii State Dept. of Labor & Industrial Relations  
1999 Occupational Employment & Wage Estimates  
Education/Training: Bureau of Labor Statistics, U.S. Dept. of Labor